

Date: Friday, 9/14/2007 2:01:23 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services  
 Job Number : 34676  
 Estimate Number : 12116  
 P.O. Number : *N/A*  
 This Issue : 9/14/2007 S.O. No. : *N/A*  
 Prsht Rev. : *NC*  
 First Issue : *NA* Type : LARGE FAB ASSY  
 Previous Run : 30454  
 Written By : *[Signature]*  
 Checked & Approved By : *[Signature]*  
 Comment : est rev A 06.01.26 new issue EC

Drawing Name : LUG WELDMENT  
 Part Number : D335313  
 Drawing Number : D3353 REV. A  
 Project Number : *N/A*  
 Drawing Revision : A  
 Material : *N/A*  
 Due Date : 9/30/2007

Qty: 4 Um: Each

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description:

1.0 M1018TR1250W109 1010-1025 Steel Tubing



Comment: Qty: 0.9188 f(s)/Unit Total: 3.6750 f(s)  
 AISI 1018-1025 mild steel seamless round tubing  
 1.250" od X 0.109" wall batch: *M106091*

*[Signature]* 08 01 04

2.0 BAND SAW BAND SAW



Comment: BAND SAW  
 Cut blank 10.50" long as per dwg D3353

*[Signature]* 08 01 04

3.0 MILLING CONV. CONVENTIONAL MILLING MACHINE



Comment: CONVENTIONAL MILLING MACHINE  
 1- Drill & tap as per dwg D3353  
 2-Deburr as per dwg D3353

*[Signature]* 08 01 10

4.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*[Signature]* 08 01 10 (4)

5.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1  
 Identify and Stock  
 Location: *490*

*8/1/11 SP* (4X)

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: D Date: 5/8/10/11  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 9/14/2007 2:01:23 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LUG WELDMENT

Job Number: 34676

Part Number: D335313

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



(4)

Comment: FINAL INSPECTION/W/O RELEASE

Doal 111

Job Completion



U 08.06.11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

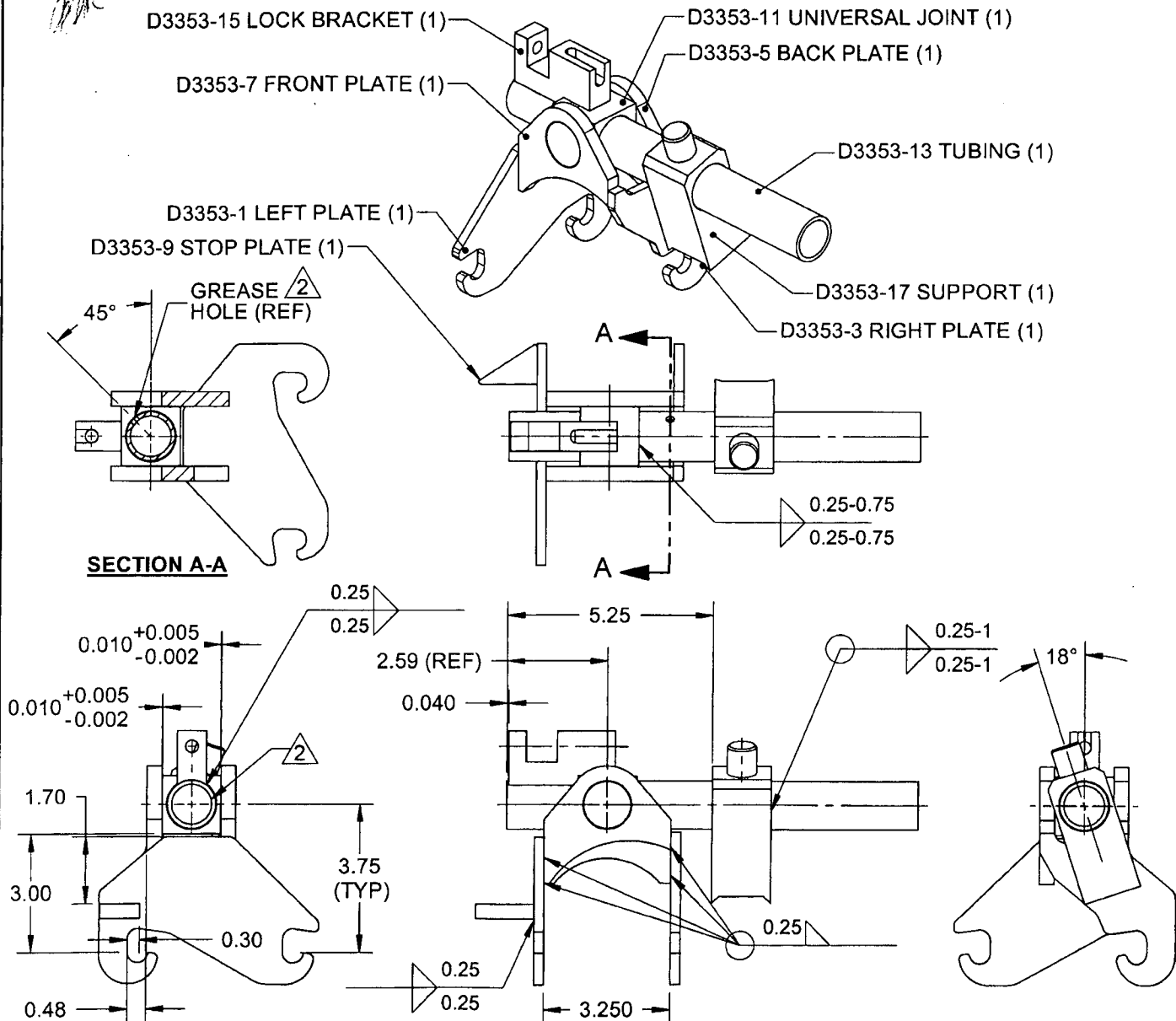
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3353</b>	REV. A SHEET 1 OF 10
DATE <b>04.12.14</b>	TITLE <b>LUG WELDMENT</b>		SCALE 1:4
A	04.12.14	NEW ISSUE	

**RELEASED**  
*[Handwritten: 03/05/09]***D3353-041 LUG WELDMENT****NOTES:**

- 1) WELD PER DART QSI 004
- 2) COVER INSIDE HOLES PRIOR PAINTING
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *34676*

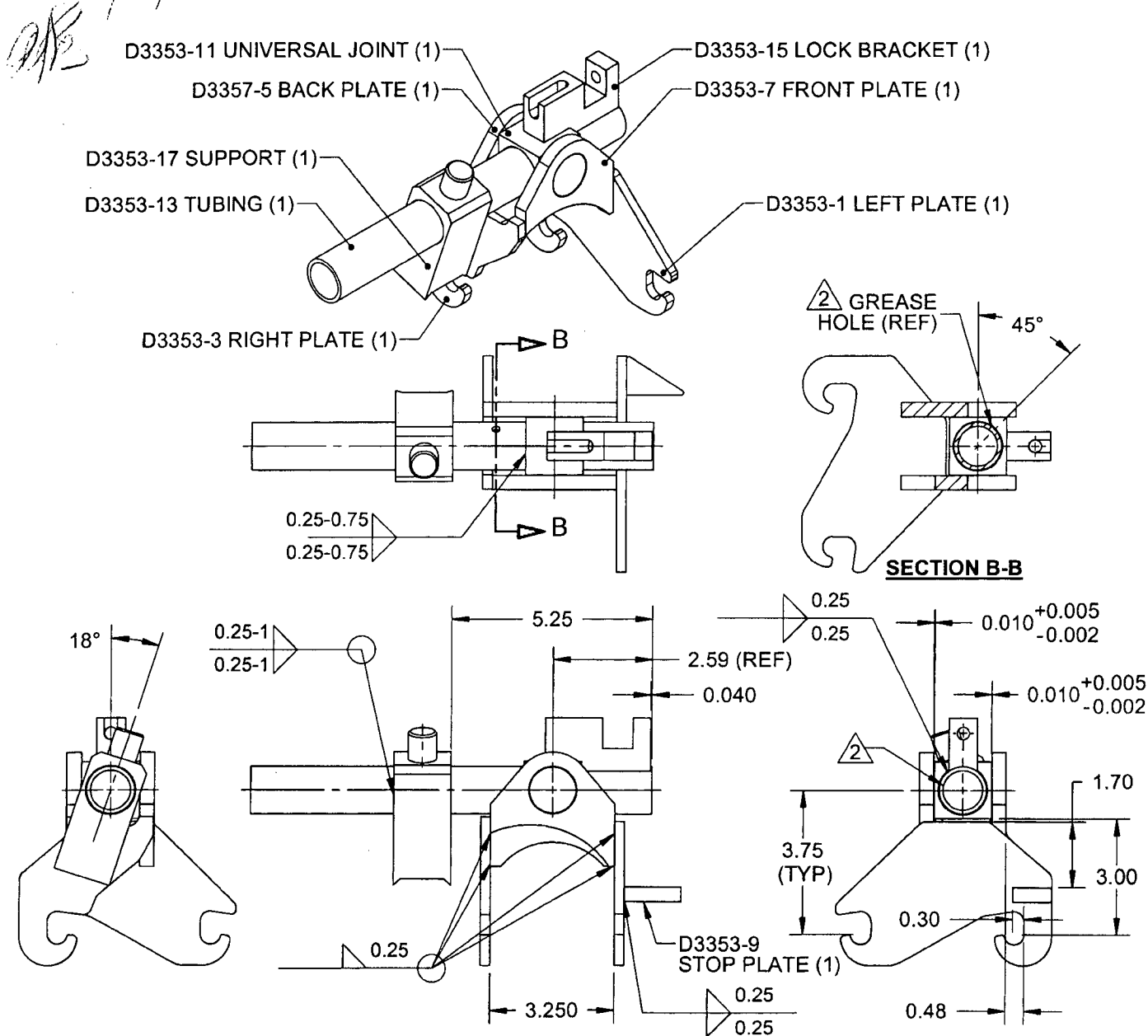
**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3353</b>	REV. A SHEET 2 OF 10
DATE <b>04.12.14</b>		TITLE <b>LUG WELDMENT</b>	SCALE 1:4

RELEASED  
04/03/59



### D3353-042 LUG WELDMENT

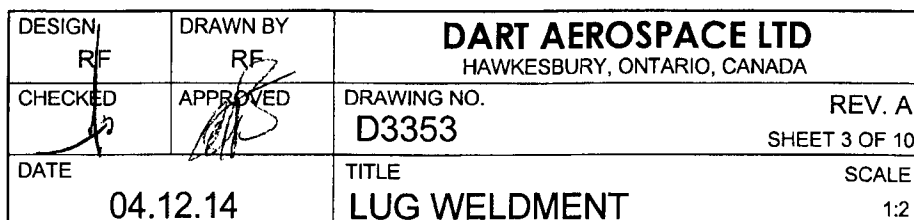
#### NOTES:

- 1) WELD PER DART QSI 004
- 2) COVER INSIDE HOLES PRIOR PAINTING
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

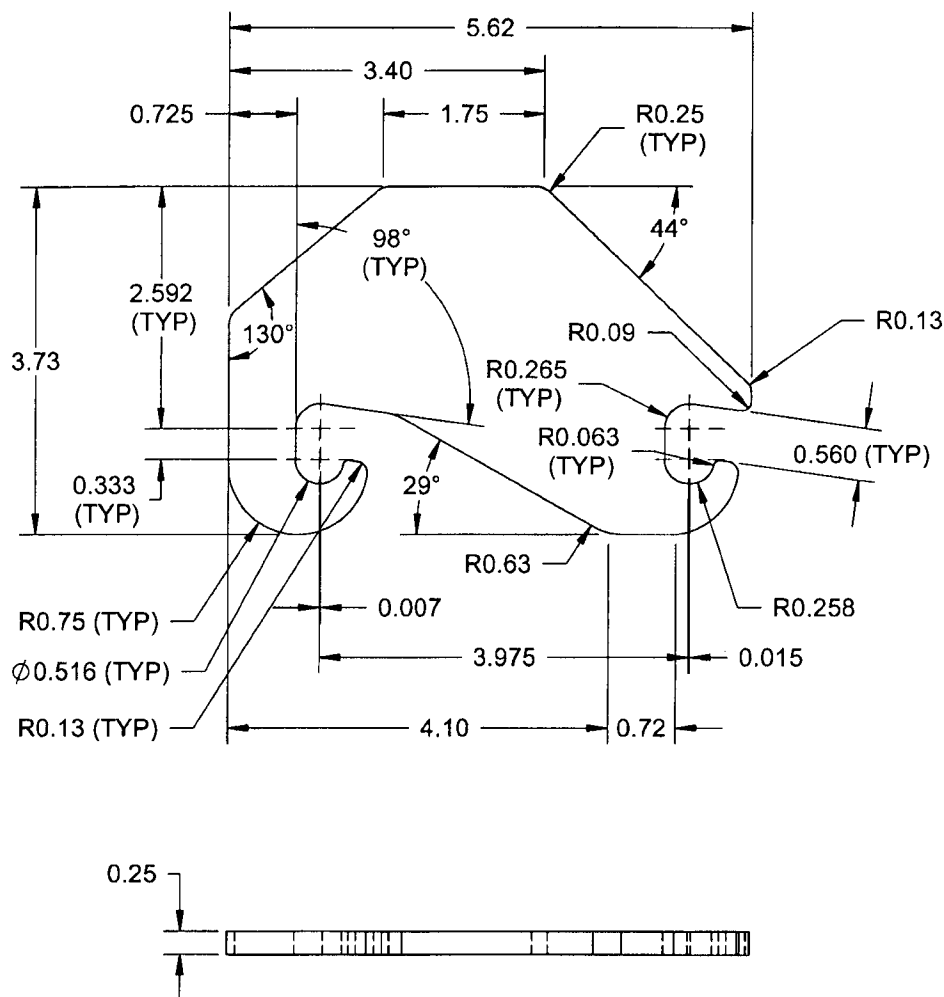
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 34676

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



RELEASED  
06/07/64



**NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21,  
38W/44W/50W/60W/70W SERIES STEEL 3 GAUGE (0.250 THICK)  
2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED U  
3) ALL DIMENSIONS ARE IN INCHES  
4) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 34676

**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.





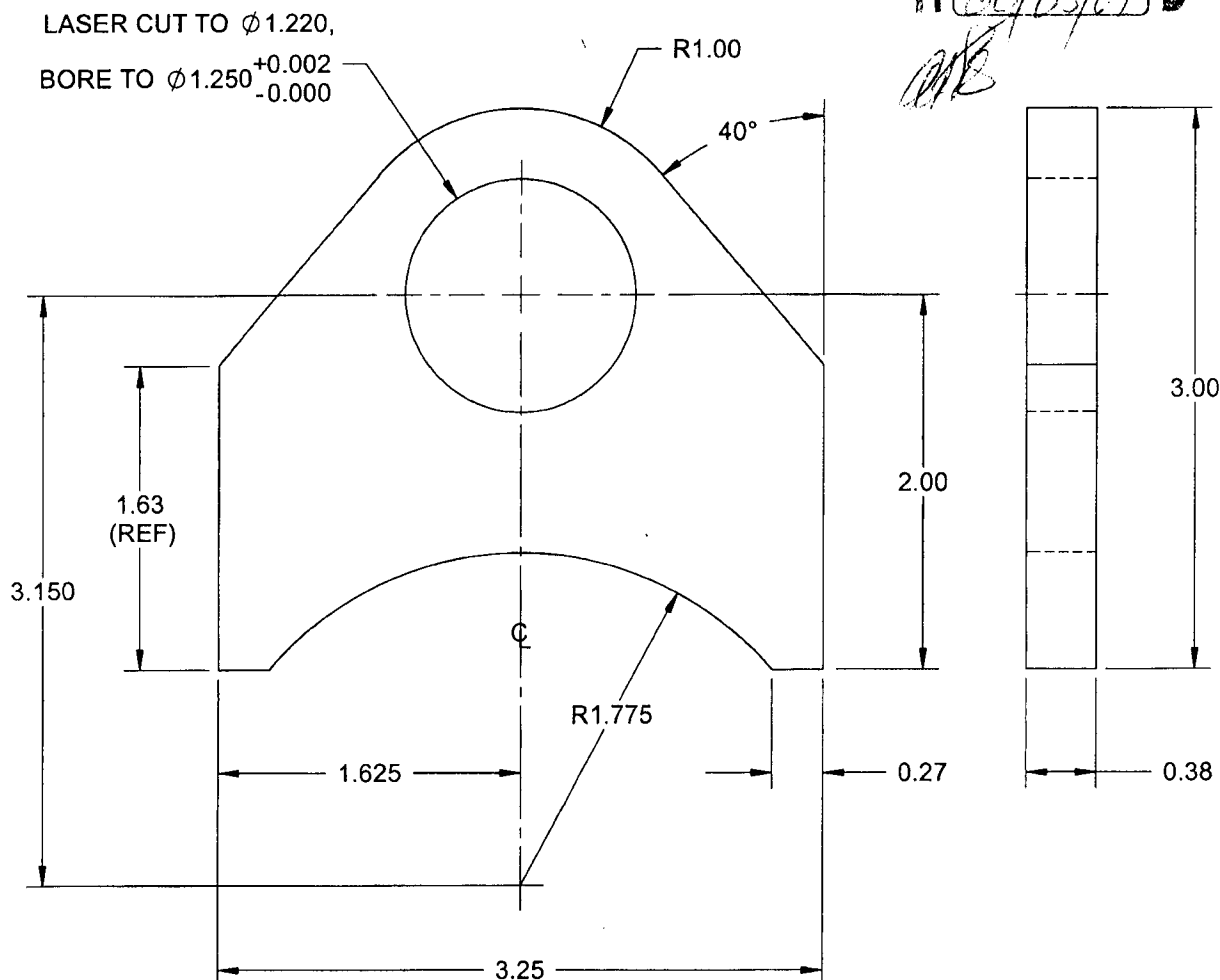






DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3353	REV. A SHEET 5 OF 10
DATE 04.12.14		TITLE LUG WELDMENT	SCALE 1:1

RELEASED  
06/03/09



### D3353-5 BACK PLATE

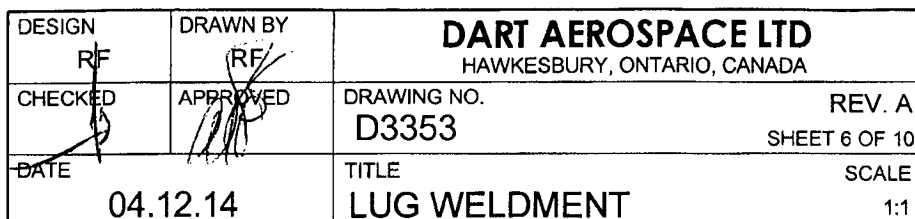
#### NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A108 OR CSA G40.21, 38W/44W/50W/60W/70W SERIES STEEL 0.375 THICK PLATE  
MIN. ULTIMATE TENSILE STRENGTH = 42 ksi  
MIN. YIELD TENSILE STRENGTH = 28 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

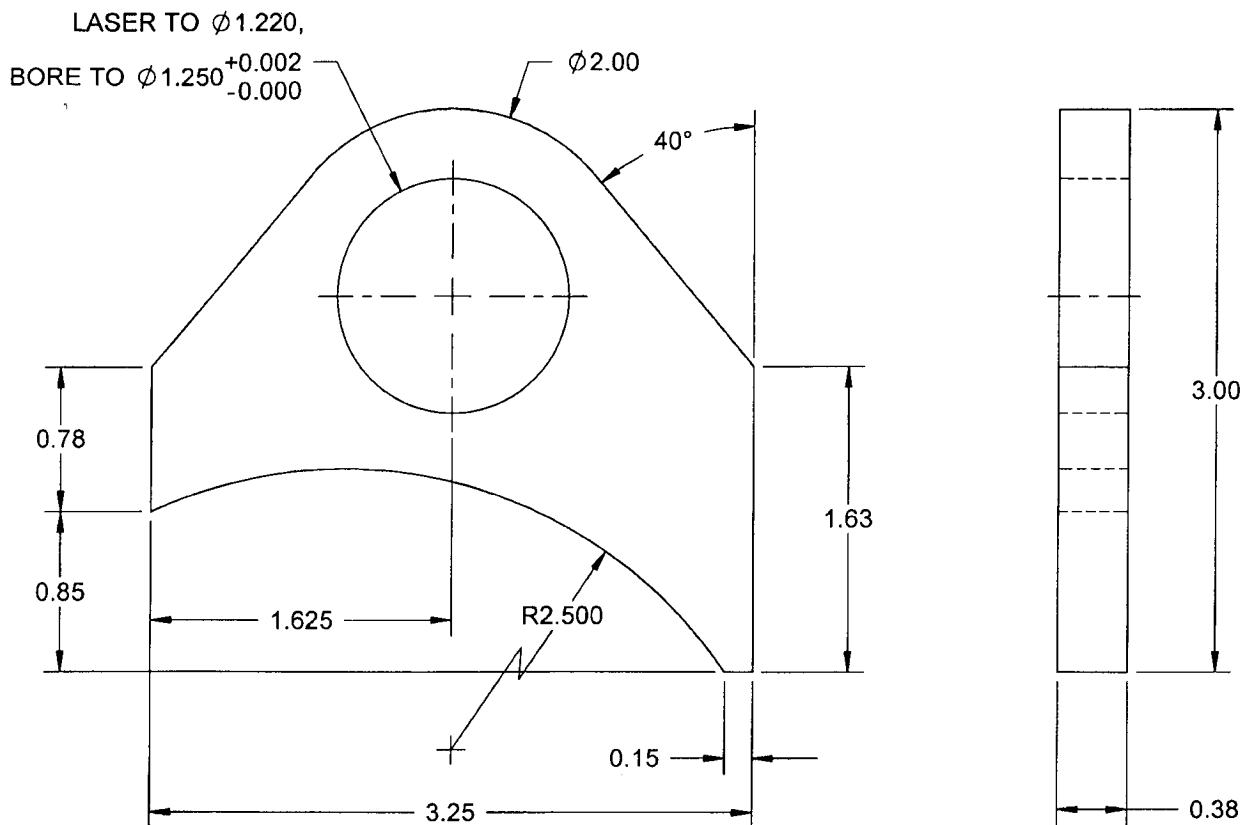
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 34676

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



RELEASED  
26/03/07



### D3353-7 FRONT PLATE

**NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A108 OR  
CSA G40.21, 38W/44W/50W/60W/70W SERIES  
STEEL 0.375 THICK PLATE  
MIN. ULTIMATE TENSILE STRENGTH = 42 ksi  
MIN. YIELD TENSILE STRENGTH = 28 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 34676

**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

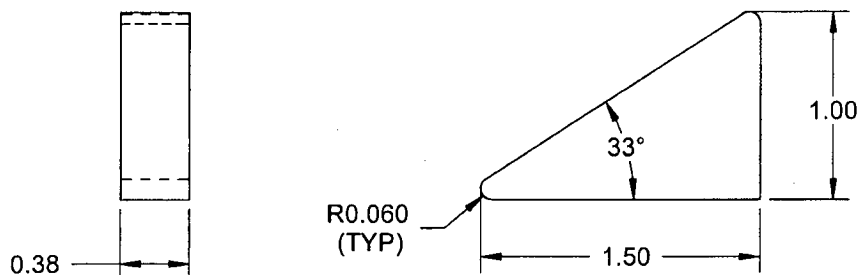
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3353	REV. A SHEET 7 OF 10
DATE 04.12.14		TITLE LUG WELDMENT	SCALE 1:1

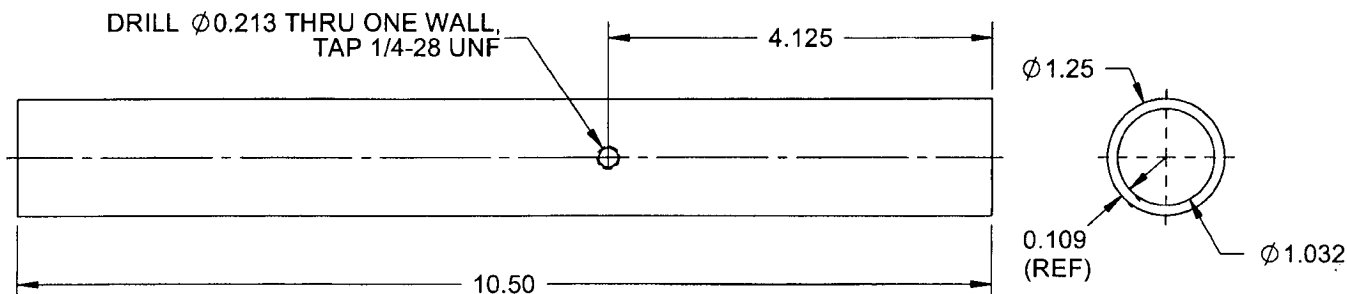
RELEASED  
6/3/04

[Signature]



### D3353-9 STOP PLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR  
CSA G40.21, 38W/44W/50W/60W/70W, 0.375 THICK  
MILD STEEL BAR (REF. DART SPEC. M1010-B)



### D3353-13 TUBING

#### NOTES:

- 1) MATERIAL: MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077,  
Ø 1.250 x 0.125 WALL, COLD DRAWN STEEL TUBING  
(REF. DART SPEC. M1020TR1.250W.109)

#### NOTES:

- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
3) ALL DIMENSIONS ARE IN INCHES  
4) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 34676

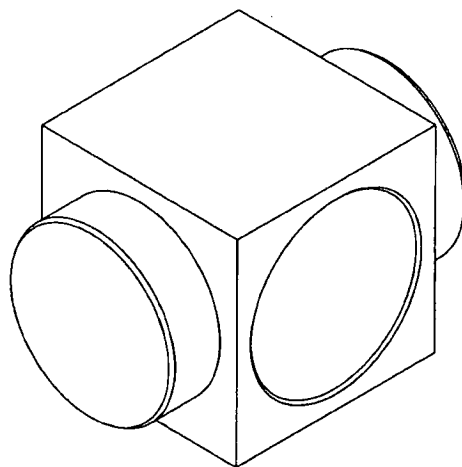
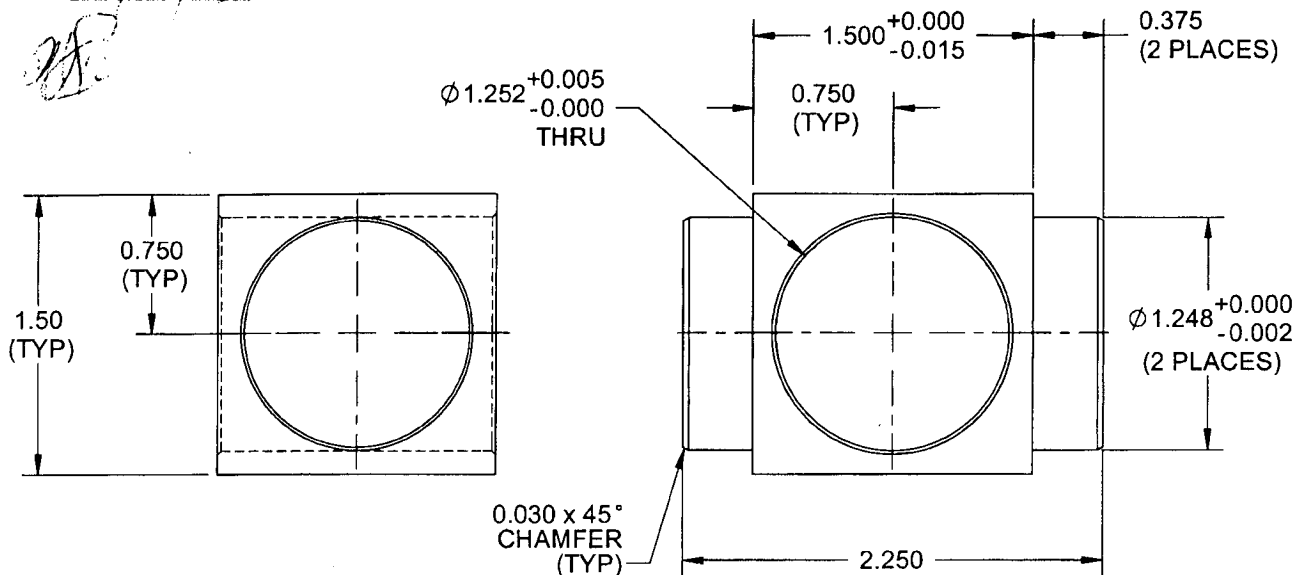
COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3353	REV. A SHEET 8 OF 10
DATE 04.12.14		TITLE LUG WELDMENT	SCALE 1:1

RELEASED  
06/33/09



### D3353-11 UNIVERSAL JOINT

#### NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 1.50 SQUARE MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

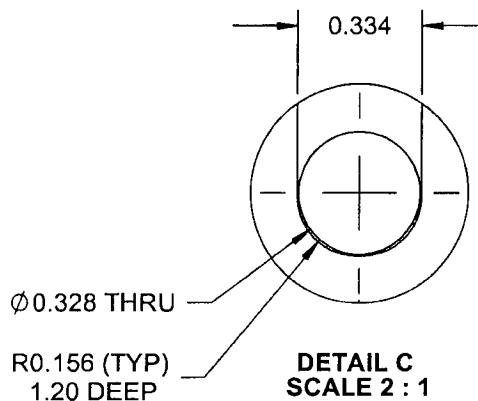
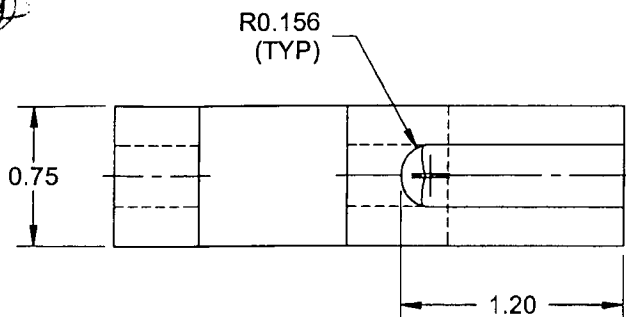
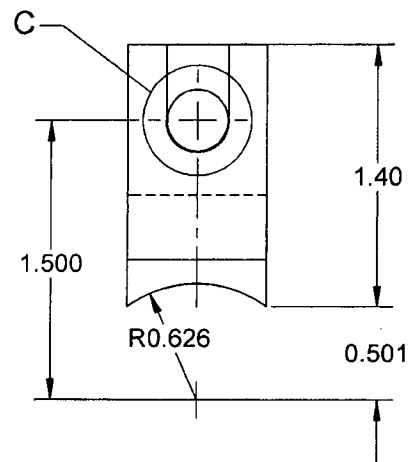
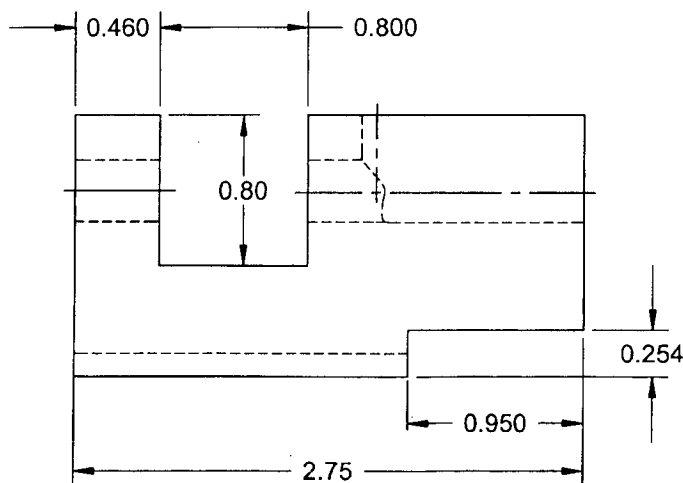
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 34676

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

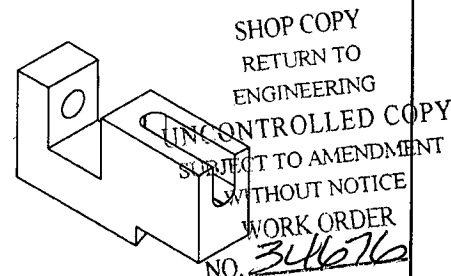
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. <b>D3353</b>	REV. A SHEET 9 OF 10
DATE <b>04.12.14</b>		TITLE <b>LUG WELDMENT</b>	SCALE 1:1

**RELEASED**  
36/02/09**DETAIL C**  
SCALE 2:1**D3353-15 LOCK BRACKET****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 0.75 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

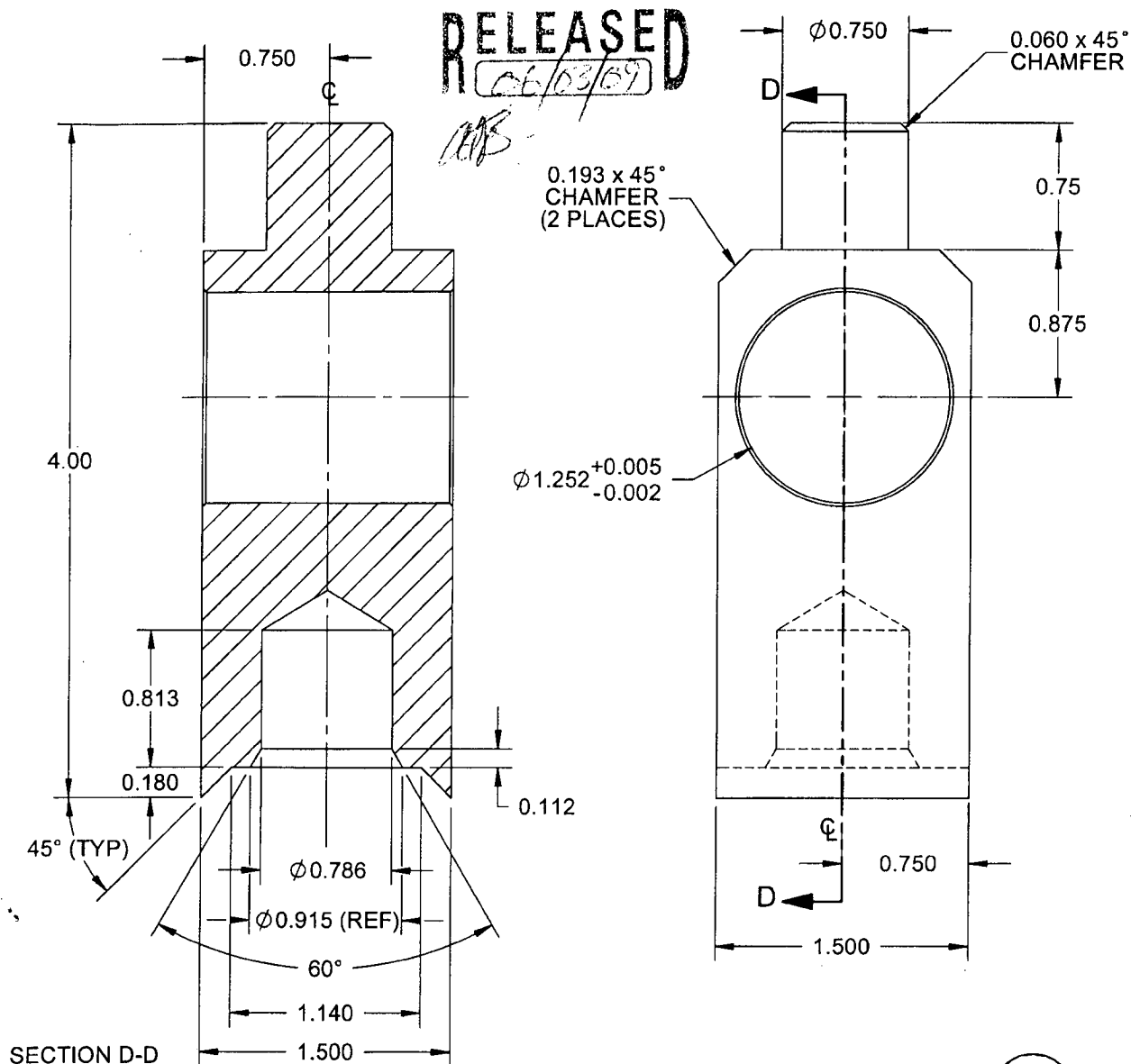
**ISOMETRIC VIEW**  
SCALE 1:2**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

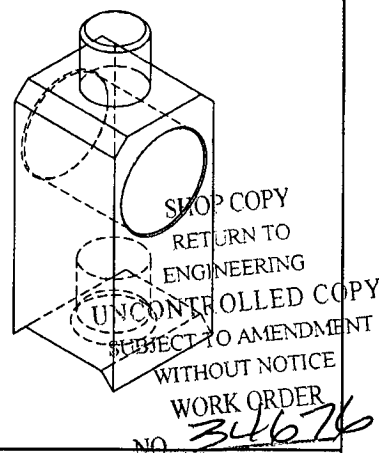


**DART**

DESIGN RF	DRAWN BY RE	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3353</b>	REV. A SHEET 10 OF 10
DATE <b>04.12.14</b>		TITLE <b>LUG WELDMENT</b>	SCALE 1:1

**D3353-17 SUPPORT****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 1.50 SQUARE MILD STEEL BAR (REF. DART SPEC. M1010-B1.500x01.500)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020



COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

